



Next Generation Wireless Emergency Public Safety Communications Network

Governance and Operations Report (Outline)

DRAFT

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Prepared by



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Executive Summary

This section will provide an executive summary of the report. The following narrative is a sample and will be modified to reflect the contents of the actual report.

Radio communications introduction

Radio communications are a vital asset to any public safety agency. Law enforcement and fire agencies rely on radio systems to receive accurate information from their dispatch centers regarding calls for service to their citizens, safeguarding lives and property while protecting the lives of the agencies' personnel. Ambulance services, public works, and emergency management agencies also find radio communications an absolute necessity to hasten emergency response.

Since September 11, 2001, public safety agencies have been encouraged by state and federal planners to improve interoperability among agencies responding to an emergency or disaster. This encouragement came in the form of both written plans and reports and opportunities to apply for grants. For the first time, inter-disciplinary communications have been encouraged, so that fire and police, for example, could communicate with one another better during response to disasters such as the one caused by the attack on the World Trade Center.

Establishing the appropriate governance and operational models to enable interoperability across a region is paramount for the safety of public safety personnel responding to incidents or disasters.

Project background

Public safety responders in Snohomish, King, and Pierce Counties frequently engage in joint operations, mutual aid, and other activities that bring them into a neighboring county. Integrated, interoperable communications is an essential tool for avoiding and responding to emergencies efficiently and safely.

There are a number of excellent individual emergency public safety communications systems operating in the region. Even so, there is currently limited interoperability among all first responders due to disparate radio systems and responders do not have a unified public safety network that enables seamless communication throughout the region. In addition, these systems will soon have one or more critical problems that if





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not addressed, will degrade service and result in increased risks to the public and first responders.

Regardless of the system's life span, imminent replacement decisions in one jurisdiction will influence decisions in other systems, and improving the existing level of interoperability through regional cooperation is necessary to provide dependable service for all system users. Users, owners, and operators of these systems have come together to form the Radio Executive Policy Committee (REPC) and its subcommittees with the goal of determining the best course of action to avoid these risks, meet regional communications requirements, and take advantage of advances in technology.

In order for the REPC to meet these goals, creating a governance and operational framework that fosters interoperable communications is critical. This report takes an in-depth look into various governance and operational models.

Governance model recommendations

*This section will summarize **FE's** recommendations for each governance model:*

- Single three-county network deployment model
- Three single-county systems deployment model

Operational model recommendations

*This section will summarize **FE's** recommendations for each operational model:*

- Single three-county network deployment model
- Three single-county systems deployment model

Next steps

This section will summarize the recommended next steps.



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1. Part A - Introduction

1.1 Purpose of this report

FE will provide a narrative describing the purpose of the report. The narrative will reflect the project as defined by the RFP, meetings, and presentations related to the project.

1.2 Project background

FE will provide a narrative describing the project background. This narrative will reflect historical data and from data collected throughout the course of the project. The project background will enable those unfamiliar with the background to understand the extensive efforts that have preceded this project

1.3 Overview of the region

This section will provide an overview of the region, providing descriptions of the counties and the region and maps for illustration.

The region is located in the Puget Sound area of the State of Washington as shown in figure X.



Figure X – Map of Counties and Major Cities (placeholder for outline)



1.3.1 Counties

The following counties are part of the REPC:

- King County
- Pierce County
- Snohomish County

Figure X shows a map of the counties and their major cities.



Figure X – Map of Counties and Major Cities (placeholder for outline)



1.3.2 Demographics

Table X identifies the size of each county, its 2000 census population, and the county seat.

Table X – County demographics

County	Area (square miles)	Population	County seat
King	2,307	1,737,034	Seattle
Pierce	1,806	700,820	Tacoma
Snohomish	2,196	606,024	Everett

1.3.3 Neighboring counties

The following counties form the boundary of the region:

- Thurston County
- Lewis County
- Kitsap County
- Jefferson County
- Yakima County
- Kittitas County
- Chelan County

Figure X shows a map of the counties which form the boundary of the region

Figure X- Neighboring counties map (to be created)



2. Methodology

***FE** will describe the methodologies utilized for the development of the report. The content will enable the reader of the report to understand the steps taken to develop the information and recommendations found in this document. The following represents a brief description of the tasks and analyses to be performed to produce the conclusions and recommendations that will be found in the final version of this report.*

1. *In order to facilitate the completion of the task requiring **FE** to review existing system documentation, **FE** created and supplied a list of relevant existing system information to the CPM that could be useful in the development of this report. The CPM distributed this list to the project participants and requested they supply the information. It may be necessary to contact various agencies or points-of-contact to acquire information on the list not supplied or other appropriate information prior to completing the first draft of this report.*
2. ***FE** will develop a data collection plan in collaboration with the CPM and the PSC. This data collection plan will detail the agencies to be interviewed, the time and dates available for interviews, and the location where the interviews will be held. The data collection phase of the project is designed to provide stakeholders an opportunity to provide input to the report. Discussions are ongoing with CPM regarding the community resources to facilitate data collection activities. Preliminary discussions indicate the CPM will coordinate one location in each county for conducting stakeholder interviews.*
3. *A series of questions designed to capture input relevant to the project goals and objectives are under development. **FE** will submit the questionnaire to the CPM and PSC for review and approval. The approved questionnaire will serve as the basis for structured face-to-face interview sessions with stakeholders. The same questionnaire will also be available on-line to facilitate data collection for those not involve in the face-to-face interview sessions.*
4. ***FE** will research existing regional governance and operational coordination models for governance and operations structures and interview participants from organizations such as:*
 - *King County Regional Communication Board (KCRCB);*
 - *Snohomish County Emergency Radio System (SERS);*





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- *Pierce County Metro Steering Committee (need to confirm proper group name)*
 - *Tri-County Regional Interoperability System (TRIS)*
 - *Agreements between The Boeing Company and SERS and KCRCB Agencies*
 - *Benton County System*
 - *Portland-Vancouver Region Agreement*
 - *Others which are relevant will be included*
5. **FE** will research existing national governance formation guidelines and standards for governance structures such as:
- *SAFECOM General Guidance and Recommendations for Interoperability-related Governance;*
 - *SAFECOM Interoperability Continuum (focusing on Governance aspects);*
 - *SAFECOM Statewide Communications Interoperability Planning (SCIP) Methodology;*
 - *NGA (National Governor's Association) Center on Best Practices;*
 - *National Association of State Chief Information Officers (NASCIO) Research Briefs; and*
 - *Other applicable local, regional, state or national guidance documents.*
6. **FE** will investigate governance models around the country having similar characteristics to those in the region to find "best practices" for governance and cost sharing that are already in place and successfully operating.
7. **FE** will describe the assumptions made in preparing the Governance and Operations Report and how they were developed.



3. Governance models

Information from the tasks and analyses outlined in Section 2, Methodology will serve as the basis for this section. The same approach used for component A will be used for subsequent components as applicable

FE will use this section to describe what a governance model is and the implications it has on a region-wide and countywide radio system.

3.1 Key components of governance models

This section describes key components of a governance model based on national models and standards and examples of successful implementation. Information from the tasks and analyses outlined in Section 2, Methodology will serve as the basis for this section.

3.1.1 Component A

FE will provide an overview of the applicable governance model component here. Key components can vary depending on the governance model presented.

3.1.1.1 Alternative 1

FE describes the major alternatives for the key components below. Additional components and alternatives will be included as applicable.

FE will provide an overview of the alternative along brief statement regarding the strengths and weaknesses of the alternative. A summary of the strengths and weaknesses of the alternative are summarized in a table similar to the example shown below. Table X summarizes the strengths and weaknesses of the alternative.

Table X – Strengths and Weaknesses

Strengths	Weaknesses



3.2 Governance models in use in the region

This section describes the governance models currently in use in King, Pierce, and Snohomish Counties.

3.2.1 King County governance models

***FE** will provide a description, review, and evaluation of the governance models currently used in King County.*

3.2.1.1 Governance Model A

***FE**, based on the information gathered during the data collection phase, will provide a description of Governance Model A. The narrative will expand on the model based on the components and alternatives described in Section X.*

The same approach will be used for additional King County governance models as required.

3.2.2 Pierce County governance models

***FE** will provide a description, review, and evaluation of the governance models currently used in Pierce County.*

3.2.2.1 Governance Model A

***FE**, based on the information gathered during the data collection phase, will provide a description of Governance Model A for Pierce County. The narrative will expand on the model based on the components and alternatives described in Section X.*

The same approach will be used for additional Pierce County governance models as required.



3.2.3 Snohomish County governance models

***FE** will provide a description, review, and evaluation of the governance models currently used in Pierce County.*

3.2.3.1 Governance Model A

***FE**, based on the information gathered during the data collection phase, will provide a description of Governance Model A for Snohomish County. The narrative will expand on the model based on the components and alternatives described in Section X.*

The same approach will be used for additional Snohomish County governance models as required.

3.2.4 Comparison of key components of the governance models in the region

***FE** will compare the key components of the governance models in use in the region. Supporting narratives will be included A table similar to the table X below will be included to summarize the comparison of key components of the governance models used in the region.*



Table X – Key Components of Governance Models in the Region

County	Governance model	Component A			Component B			Component C		
		Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3
King County	Governance model A		X		X					X
	Governance model B	X				X			X	
	Governance model C			X	X				X	
Pierce County	Governance model A	X				X				X
	Governance model B		X			X			X	
	Governance model C			X		X		X		
Snohomish County	Governance model A	X							X	
	Governance model B						X			X
	Governance model C		X		X					

3.3 Governance models throughout the country

FE will use this section to describe the governance models currently in use throughout the country that have characteristics similar to those used in the region. The information provided in this section will result from the data collection and analyses tasks outlined in Section 2, Methodology.

3.3.1 Governance model example 1

FE will provide a description, review, and evaluation of the governance model. The narrative will expand on the model based on the components and alternatives described in Section X.

The same approach will be used for additional governance models throughout the country as required.



3.3.2 Comparison of key components of the governance model examples

FE will compare the key components of the governance models in use in the region. Supporting narratives will be included. A table similar to the table X below will be included to summarize the comparison of key components of the governance models used in the region.

Table X –Key Components of Governance Models across the Country

Governance model	Component A			Component B			Component C		
	Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3
Example 1	X					X			X
Example 2		X			X				X
Example 3			X	X				X	

3.4 Governance model recommendations

Based on information collected and analyses performed using the methodologies outlined in Section 2 of this report, FE will provide a recommendation of a governance model for each deployment model.

3.4.1 Recommendation for single three-county network deployment model

FE will provide a recommendation of the governance model best for use in this deployment model and the rationale for the recommendation.

3.4.2 Recommendation for three single-county systems deployment model

FE will provide a recommendation of the governance models best for use in this deployment model and the rationale for the recommendation. The recommendation may differ for each county.



4. Operational models

***FE** will describe what an operational model is and the implications it has on a region-wide radio system.*

A number of operational models exist in both the Puget Sound Region and around the United States. Within King, Pierce and Snohomish Counties alone, there are the following examples of operation models:

- *Single common system with direct representation by the ten largest users of the system*
- *Four systems using identical technology that share a common central control system, with close coordination of technical system characteristics and joint funding for the shared controller costs.*
- *Two systems using an identical technology that share a common central control system owned by one of the two system operators, governed by an agreement directly between the operators of the two systems.*
- *Multiple single owner systems with technologies used that range from very complex multi-site trunked operation to much less complex conventional radios systems operating from a small number of radio sites.*

Each mix of technical, operational and governance characteristics will be described in the following section.

4.1 Key components of operational models

This section describes key components of an operational model based on national models and standards and examples of successful implementation.

The approach used in this section will follow the approach used in the preceding sections for governance models in terms of structure, tables, and comparisons. For brevity, the tables and structure are not included in this operation section of the outline.

***FE** will collect and analyze data for the following regional models:*





4.1.1 King County Operational Models

- *King County Regional Communications Board (KCRCB)*
- *Tri-County Regional Interoperability System (TRIS)*
- *NORCOM Interlocal*
- *Others to be identified*

4.1.2 Pierce County Operational Models

- *Metro Steering Committee*
- *LESA Dispatch Agreements with Outside Agencies being Dispatched*
- *Others to be identified*

4.1.3 Snohomish County Operational Models

- *Snohomish County Emergency Radio System (SERS)*
- *Cross-System User Agreements between SERS Agencies and The Boeing Company*



5. Part B - Answers to questions in Attachment M of the Contract

FE will provide answers to questions in Attachment M of the Contract for each deployment model in this section. The following paraphrases a number of the technical questions that have an impact on the governance structure, as well as including the governance-specific questions verbatim.

- What are the governance impacts of continuing to operate, maintain, and repair the current networks for the next five years without taking steps to rebuild those networks during that period?
- What are the governance impacts of a partial upgrade approach that would meet the most important technical and operational requirements at a substantially lower cost than a full rebuild of the Networks in the Region?
- What are the governance impacts from a strategy that leverages the existing communications assets in the Region, including at local, state, and federal levels, for the Network, and, if so, what infrastructure? For example, is it technically feasible to use the Next Generation Switch, the METRO or Pierce Transit Radio Systems, or existing sites and towers? What are the governance challenges of such an approach?
- What government agencies (local/state/federal) and disciplines (Law Enforcement/Fire/PSAPs/ Dispatch/OEM/EMS/Public Works etc.) should be included in the Network Governance Model?
- Should any private agencies (utilities/Boeing, etc.) be included in the Network Governance Model? If so, how would private agencies be included in the model?
- Is there a role for the State to participate in, contribute to, or support the governance structure established for the Network?
- What governance (political, funding, voter-related) risk factors could drive the deployment of the Network beyond its budget and beyond a reasonable timeframe for completion?
- With the various governance structures available for consideration, is it feasible for the individual counties or system owners in the region to improve, upgrade or replace their systems independently of each other, while still remaining interoperable?





- Has this been done in other places in the United States? What are the advantages or disadvantages of such an approach?

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6. Recommendations

6.1 Final recommendations for single three-county network deployment model

FE will provide a recommendation for the governance and operational model best for a single three-county network deployment model. FE will also include the rationale used to arrive at the recommendation.

6.2 Final recommendations for three single-county systems deployment model

FE will provide a recommendation for the governance and operational model best for a single three-county network deployment model. FE will also include the rationale used to arrive at the recommendation.



7. Next steps

FE will describe the next steps the REPC should take in forming a governance and operational structure.

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Appendix X

Insert appendices as needed.

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